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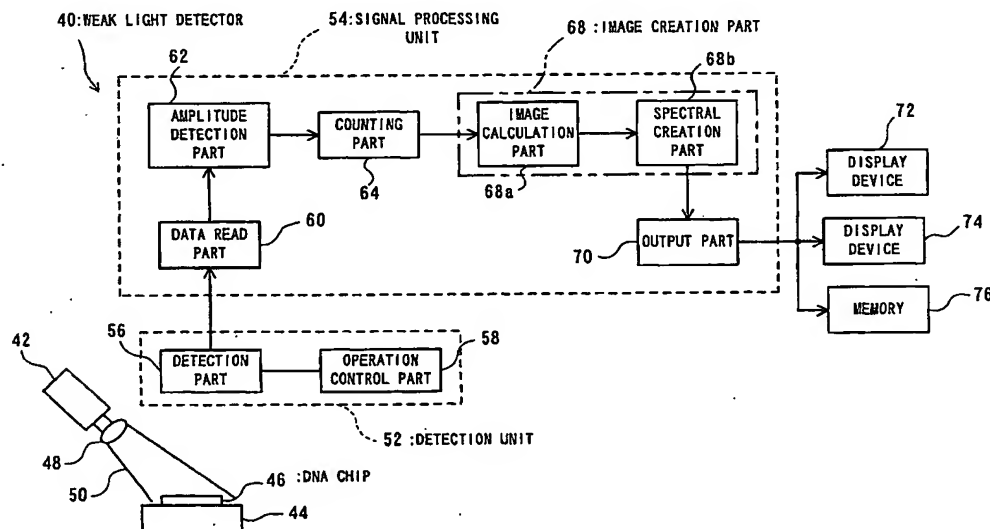
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(54) Title: TWO-DIMENSIONAL WEAK RADIATION DETECTOR



(57) Abstract: A weak light detector (40) which can detect two-dimensional weak radiation at a high speed with high precision. The fluorescence from the DNA chip (46) is incident on a detection part (56) of a detection unit (52). The detection unit (56) has a detection module with a number of detection transistors being placed to correspond to cells of the DNA chip (46). The detection part (56) performs photoelectric conversion of the incident fluorescence (photon) to emit electrons, and amplifies the electrons to make them incident on the detection module. The detection transistors are switched based the Hadamard matrix to operate. A data processing unit (54) reads an output signal of the detection part (56), then performs Hadamard inversion, and determines the detection transistor which outputs the signal.

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INTERNATIONAL SEARCH REPORT

International application No.

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A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl⁷ G01N21/64, H01L27/14, H01J43/04, H04N5/32

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ G01N21/62-21/74, H01L27/14, H01J43/04, H04N5/32

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
 Japanese Utility Model Gazette 1926-1996, Japanese Publication of Unexamined Utility Model Applications 1971-2002, Japanese Registered Utility Model Gazette 1994-2002, Japanese Gazette Containing the Utility Model 1996-2002

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

JOIS (JICST Files)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 627756 A1 (HAMAMATSU PHOTOTONICS KK) 1994.12.07, see all document, Fig.1 & JP 7-50149 A & US 5471051 A	1-4
A	JP 2002-203508 A (KYOSERA KK) 2002.07.19, see all document, Fig.1-5 (Family:none)	1-4
A	JP 2001-108684 A (HITACHI SEISAKUJO KK) 2001.04.20, see all document, Fig.1 (Family:none)	1-4



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